CLAIMS

1. A blood flow visualizing diagnostic apparatus characterized by having:

an ultrasonic measurement unit which emits an ultrasonic signal toward a blood vessel inside a human body to receive the reflected ultrasonic signal;

an analysis processing unit which obtains a blood vessel shape and a blood flow velocity in the blood vessel by the received signal;

a simulation unit which sets computational lattices on the basis of the blood vessel shape obtained by said analysis processing unit to simulate the blood flow velocity and a pressure distribution;

a feedback unit which computes an error between the blood flow velocity obtained by said analysis processing unit and the blood flow velocity obtained by said simulation unit to feed back the error to said simulation unit; and

a display unit which displays the blood flow velocity and the pressure distribution output from said simulation unit after the feedback.

2. A blood flow visualizing diagnostic apparatus according to claim 1, characterized in that said feedback unit performs the feedback to a sufficiently large number of representative points which are distributed over the blood flow domain in said computational lattices.